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10/660,901	09/12/2003	Paul J. Wyser	KEL 006 P2	7410
34232 7590 02/12/2007 MATTHEW R. JENKINS, ESQ. 2310 FAR HILLS BUILDING DAYTON, OH 45419			EXAMINER ALEJANDRO, RAYMOND	
			ART UNIT	PAPER NUMBER
			1745	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/12/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/660,901	WYSER, PAUL J.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Raymond Alejandro	1745	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11, 13-15 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

In response to applicant's amendment of 01/30/07, please find included herein an office action containing grounds of rejection for all pending claims. In summary, Applicant has overcome the 35 USC 112 and the art rejections. Refer to the abovementioned amendment for more information concerning applicant's rebuttal arguments and remarks. However, the present claims are finally rejected over new grounds of rejection including newly discovered references as shown infra and for the reasons of record:

### ***Claim Disposition***

1. Claims 12 and 16-20 have been cancelled.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Robertson 4040938.

Robertson illustrates in **FIGURE 8** below an electrode arrangement for electrochemical cell (TITLE/ABSTRACT/COL 1, lines 5-7) comprising the electrode arrangement 32 comprising one anode and one cathode, each electrode is a nickel sheet and a separator therebetween (COL 5, lines 31-35). The core of the coiled electrode arrangement is a solid Ni-rod 31 (*the pin inside said housing*); the electrode sandwich 32: nickel foil, separator, nickel foil, separator is rolled up tightly around the Ni-rod 31; the electrode roll 31, 32 is lodged in a cell container (COL 5, lines 35-45). Further disclosed is an electrode roll with two electrodes and a point 12 representing the electrical connection of the electrode and the axle 30 (COL 4, lines 50-59); and the electrodes are wound tightly around a central core 30 (COL 3, lines 33-36).

The Ni-rod 31 makes electrical contact with the anode sheet of the roll and is provided with a connection bolt 37 (*the second connection between the first contact connection and the pin*) to serve as current feeder to the anode (COL 5, lines 45-50). The material for the construction of the electrodes includes metals; and the electrode may also have coatings made of

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metallic-based compound; and the electrode rolls can be made from sheet materials (COL 4, lines 1-16). *These teachings encompass one electrode being supported on a metallic based sheet which makes direct electrical contact with rod 31.*

Robertson further discloses the incorporation of bus-bars 59, 60 to feed electricity from the power source to the electrical connections of the electrode rolls (COL 7, lines 45-55). The electrical connection to the electrode roll is made by mounting the bus-bars directly onto the ends of the electrode rolls; these provide connection to the complete edge of each electrode (COL 8, lines 37-43). *In this case, the bus-bars represent the first one contact connection which is fitted to an outer face of the housing.*

As per Robertson's disclosure, electricity is applied to the cell and the current density is adjusted at  $2.33 \text{ mA/cm}^2$  (COL 5, lines 65-68). *Robertson discloses an electrochemical cell (a battery) regardless of whether it is used for electrochemical production of current or current is being fed into the cell.*

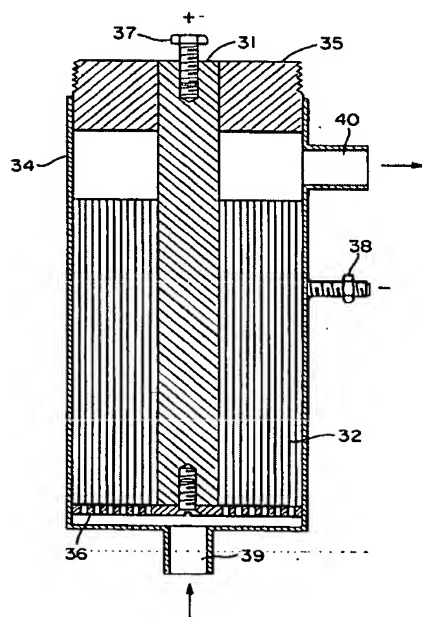


FIG. 8

**Examiner's note:** *It is noted that the instant claims are being construed as product-by-process claims and that the product itself does not depend on the process of making it. Accordingly, in a product-by-process claim, the patentability of a product does not depend on its method of production. In that, it is further noted that the product in the instant claims is the same as or obvious over the product of the prior art. This claim construction is introduced herein to address the limitation "welded" in the context of "said at least one pin and said metallic supporting strip of said at least one wound electrode element is welded directly to said at least one pin". Note that Robertson discloses that The Ni-rod 31 makes electrical contact with the anode sheet of the roll (COL 5, lines 45-50). Thus, since Robertson discloses a direct electrical connection between those two members, for purpose of art construction, the electrical contact of Robertson has the same of effect having the claimed components directly welded or connected for achieving suitable electrical contact.*

**As to claims 2-3:**

The Ni-rod 31 makes electrical contact with the anode sheet of the roll and is provided with a connection bolt 37 (*the second connection between the first contact connection and the pin*) to serve as current feeder to the anode (COL 5, lines 45-50). *In this context, the head of the bolt 37 forms the first contact.*

Therefore, the claims are anticipated by Robertson. However, if the claims are not anticipated the claims are obvious as it has been held similar products claimed in product-by-process limitations are obvious In re Brown 173 USPQ 685 and In re Fessman 180 USPQ 324 **(Refer to MPEP 2113: Product-by-Process Claims)**.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

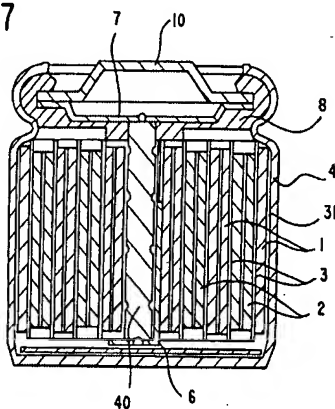
7. (At least) Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Nagaura 5958620.

As to claim 1:

Nagaura illustrates in **Figures 7, 10b and 12b** the features of the claimed invention. Nagaura teaches a non-aqueous battery comprising a battery element consisting of a strip-shaped positive electrode 2 and negative electrode 1 which have metallic foils as current collectors being separated by a separator 3 and wound into a jelly roll (**CLAIM 3/ EXAMPLE 4/ Figure 7**). The battery element is housed in a battery casing and an opening of the casing has a lid 7 (*the second connection between the first contact and the pin*) affixed to it and in which cylindrical battery a metallic rod 40 (*the pin inside the housing*) is inserted into a hole in the center of the battery element, to one end of which said rod is welded to a positive electrode lead or a negative electrode lead and to the other end of which is welded said lid 7 (**CLAIM 3/ EXAMPLE 4/ Figure 7/COL 15, lines 30-35**). Positive external terminal 10 (*the first contact fitted to an outer face of the casing*) is then laid on top of and in contact with sealing lid 7 (COL 12, lines 3-5). Electrode lead 6 is welded to the one end of the Al-rod is in close proximity to the hole in the center of the coiled battery element (COL 12, lines 10-14). *Any one of the positive electrode lead, negative electrode lead or even the strip shaped current collectors may serve as the*

metallic supporting strip. Particularly, either the positive electrode lead or the negative electrode are directly welded to the rod 40. Nagaura describes a charging current of 500 mA (COL 14, lines 1-10).

Fig.7



### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

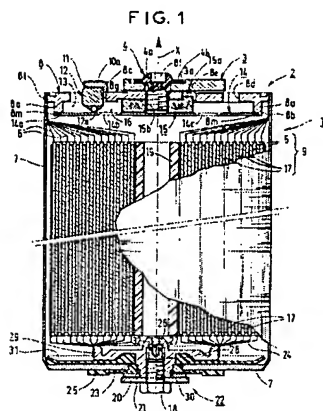


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10. Claims 1-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Souliac et al 6399237 in view of Nagaura 5958620.

Concerning claim 1:

**Figure 1** of Souliac et al illustrate battery cell 1 comprising a container in the form of a cylindrical can 7; and at least one alternation of positive electrode, negative electrode and separator wound in a spiral form (COL 3, lines 53-63). Souliac et al disclose that the end of the cell incorporate the negative terminal 22; wherein blades 24 are connected to the negative electrode and welded to a connecting part 29 which is in contact with a screw 18 which immobilizes a nut 20, and two washers (COL 4, lines 1-16). Included is also a screwthreaded housing 30 at the center of the connecting part 29 providing access thereto. All that is then required to make the electrical connection to the outside of the cell 1 is to accommodate the screw 18 in the external part of the housing 30 and to collect the current from the screw 18 by any appropriate means (COL 4, lines 1-16). Disclosed is a cell which is compact (COL 1, lines 25-27). Reference numeral 19 is a support (COL 3, lines 60-63) wherein the cell is assembled by winding the alternating electrodes 5, 17 and separator around the support 19 (COL 6, lines 16-23). Blades 24 are welded to the connection part 29 (COL 6, lines 18-21). Connection part 29 is welded to the blades 24 which (COL 6, lines 16-22) and blades 24 are connected to the negative electrode (COL 4, lines 5-10). *Thus, connection part 29, serving as applicant's pin as interpreted by the examiner, indirectly provides mechanical support to the wound electrode assembly.*



Additionally, it is disclosed that an electrical connection member 3 external to the cell 1 is fixed to the cover 8 at the end 2, the two parts 8 and 3 being fastened together by clamping means using a nut and a screw 4 external to the cell (COL 4, lines 40-52). The screw has a head 4a and ring inserted into the housing. The cover also includes a screwthreaded opening 8f accommodating part of the screw (COL 4, lines 40-52).

*Note: In this instance, it is noted that the two screws (first and second pins) are electrically connected as instantly claimed and they are tightened mechanically.*

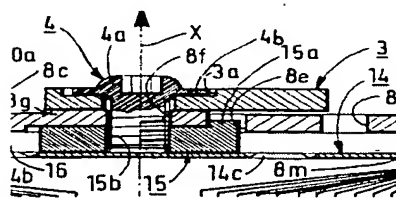
Concerning claims 2-3 and 12:

Souliac et al use screws themselves or screw-based connections to connect the battery (COL 4, lines 1-16/COL 4, lines 40-52/ See FIGURE 1).

As for claims 4 and 9:

Furthermore, the cell of Souliac et al also comprises a nut 15 which also provides electrical connection and mechanical stability to the screw on the positive electrode side (See FIGURE 1). Souliac et al disclose that such a nut is a nickel-plated steel element (COL 4, lines 40-45). *If feature 15 represents the contact board, thus, as seen above in the enlarged portion of Figure 1, feature 15 is arranged in a depression in the housing.*

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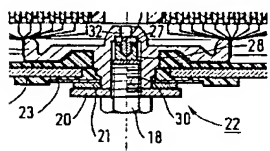


Concerning claims 5 and 13-14:

As illustrated in **Figure 1** above, the cell of Souliac et al at least comprises two screw (pins) in electrical connection with the electrodes thereof (See FIGURE 1).

Concerning claim 6:

**Enlarged portion of Figure 1** below depicts the screw 18 being in the form of a small tube (See Figure 1). *Additionally, it is apparent that the tube form of the screw per se provides the claimed broadened area in the screw to allow it to support therefrom. Absent further description of the structure of the broadened area, it is contended that the screw does have broader sections along its length that allow it to support in the battery case.*



Concerning claims 7 and 15:

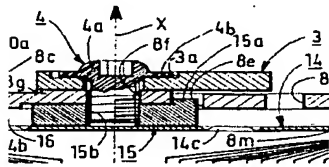
As illustrated above in **Figure 1**, only one screw is held at only one end (See FIGURE 1).

Concerning claims 8 and 10-11:

Either nut 20 or electrical connection member 3 serves as the contact board (See FIGURE 1). Moreover, as seen below feature 3 is divided into two sections, one section on the right and another section on the left (See Enlarged Portion of Figure 1 below). *Also, since at least electrical connection member 3 provides electrical connection therebetween, it can be reasonably argued that it is an electronic component. Unless the present claims provide further*

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*structural description of the specific contact board and/or contact connections, it is contended that the cited members meet the claimed structural requirement.*



Souliac et al disclose a sealed storage cell according to the aforementioned aspects.

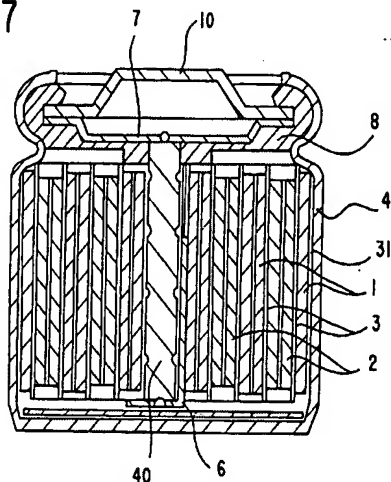
However, the preceding prior art reference fails to expressly disclose the specific metallic supporting strip welded to at least one pin.

Nagaura illustrates in **Figures 7, 10b and 12b** the features of the claimed invention.

Nagaura teaches a non-aqueous battery comprising a battery element consisting of a strip-shaped positive electrode 2 and negative electrode 1 which have metallic foils as current collectors being separated by a separator 3 and wound into a jelly roll (**CLAIM 3/ EXAMPLE 4/ Figure 7**). The battery element is housed in a battery casing and an opening of the casing has a lid 7 (*the second connection between the first contact and the pin*) affixed to it and in which cylindrical battery a metallic rod 40 (*the pin inside the housing*) is inserted into a hole in the center of the battery element, to one end of which said rod is welded to a positive electrode lead or a negative electrode lead and to the other end of which is welded said lid 7 (**CLAIM 3/ EXAMPLE 4/ Figure 7/COL 15, lines 30-35**). Positive external terminal 10 (*the first contact fitted to an outer face of the casing*) is then laid on top of and in contact with sealing lid 7 (COL 12, lines 3-5). Electrode lead 6 is welded to the one end of the Al-rod is in close proximity to the hole in the center of the coiled battery element (COL 12, lines 10-14). *Any one of the positive electrode lead, negative electrode lead or even the strip shaped current collectors may serve as the metallic supporting strip. Particularly, either the positive electrode lead or the negative*

electrode are directly welded to the rod 40. Nagaura describes a charging current of 500 mA (COL 14, lines 1-10).

Fig.7



In view of the above, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to weld the specific metallic supporting strip to one pin of Souliac et al as taught by Nagaura because Nagaura teaches that by having the specific metallic supporting strip welded to the pin (rod) there is no need to fold the electrode lead to enable the installation of the lid as in conventional methods, meaning that only a very short electrode lead is required (Nagaura at COL 15, lines 30-52). Accordingly, under Nagaura's invention, there will be no batteries which do not function fully due to poor electric conduction between the metallic casing and the electrode, thereby, boosting battery reliability. As this invention requires only a very small cross-sectional area, there is also no concern about temperature increases in the electrode lead due to the passage of large currents (Nagaura at COL 15, lines 30-52). This removes the danger of batteries catching fire when the electrode lead becomes the source of ignition, particularly in non-aqueous cylindrical batteries which use combustible organic electrolytes. Eliminating the need to spot weld the electrode lead to the casing bottom also allows

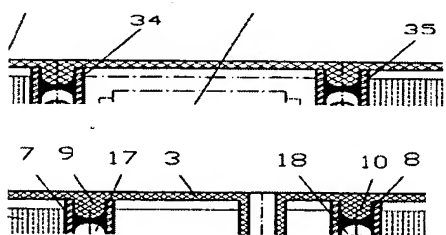
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the housing of the battery element after electrolyte has been impregnated into the battery element, enabling the removal of the process of injecting electrolyte into the metallic casing, which has seriously hampered productivity (Naguara at COL 15, lines 30-52).

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Souliac et al 6399237 in view of Nagaura 5958620, and further in view of the EP 1100138 (heretofore 'the EP'138').

Souliac et al and Nagaura are applied, argued, and/or incorporated herein for the reasons discussed above. However, the preceding prior art does not expressly disclose the pin directly engaging a wall of the housing.

The EP'138 disclose a battery (TITLE) including a housing 3,4,5 and pins 13, 14 or 32, 33 (ABSTRACT). As shown in at least the enlarged portion of **Figure 5a**, pins 34, 35 (*as interpreted by the examiner*) engage a wall of the battery housing. The same is also true for pin 7 (*as interpreted by the examiner*) in **Figure 1** (enlarged portion thereof).



In view of the above, it would have been obvious to a person possessing a level of ordinary skill in the art at the time the invention was made to directly engage the pin to a wall of the housing of the Souliac et al- Nagaura as taught by the EP'138 as the EP'138 discloses that such engaging arrangement enhances the battery fixing support of internal elements. Thus, it does improve mechanical stability of the battery assembly.

***Response to Arguments***

12. Applicant's arguments with respect to all of the rejected claims have been considered but are moot in view of the new grounds of rejection.

13. The following responses to applicant's arguments are maintained herein as they are deemed to be pertinent to certain comments made by the applicant.

14. Applicant has argued that that the *"features of the pin, ...is substantially different from the connecting part 29"*, because applicant's *"pin is simultaneously a supporting element for the wound electrode element and is held robustly or directly engages a wall of the battery's housing"*, and therefore, the claim 1 is not unpatentable over the cited references. In reply, the examiner strenuously asserts that the claimed pin lacks structural features or characteristics fully distinguishing from the prior art of record. For instance, connection part 29 is welded to the blades 24 which (COL 6, lines 16-22) and blades 24 are connected to the negative electrode (COL 4, lines 5-10). Thus, connection part 29, serving as applicant's pin as interpreted by the examiner, indirectly provides mechanical support to the wound electrode assembly and indirectly (electrically) contact the wound electrode assembly through blades 24. Thus, the connection part 29 of the prior art does provide the necessary functional and structural relationship to satisfy the claimed requirement. As to the having the pin directly engaging a wall of the battery's housing, independent claim 1 is wholly silent about such a limitation, therefore, it is not a primary feature of the main invention at hand. Nevertheless, a newly discovered reference does disclose, teach or illustrate such inventive concept.

15. Further to the above argument, applicant has expressed that *"the battery as defined by amended claim 1 differs from the battery of Souliac in the following aspects: a) the capacity of*

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*less than 1 Ah or less; b) inside the housing a pin to contact the electrode element is arranged; c) the electrode element is wound around the pin; d); the supporting strip of the electrode element is welded directly to the pin". Aspects b) and d) have been fully addressed and discussed in the immediately preceding paragraph (See item 14).*

As to aspect c), reference numeral 19 is a support (COL 3, lines 60-63) wherein the cell is assembled by winding the alternating electrodes 5, 17 and separator around the support 19 (COL 6, lines 16-23). Blades 24 are welded to the connection part 29 (COL 6, lines 18-21). Now, it is imperative to visualize that the whole connection part 29 is smaller than the entire wound electrode assembly; therefore, the outer-most section of the wound electrode assembly is indirectly wound around the connection part 29. On the other hand, central part of the connection part 29 (i.e. the projecting part situated substantially along the X axis, see Figure 1) still satisfies the requirement of having the wound electrode assembly around it as Souliac et al disclose that "*cell 1 includes an electrochemical stack 9 including at least one alternation of positive electrode 5, negative electrode 17, and separator, generally wound in a spiral about an axis X on a central support 19 inserted into the can 7*" (Souliac et al, Col 3, lines 58-63). Thus, since the central part of the connection part 29 is also inserted in the can 7, it should be noted that the electrode-separator assembly of Souliac et al is also indirectly wound around either the entire connecting part 29 or just the central part thereof. Nowhere does independent claim 1 recite a direct contact between the pin and the wound electrode element or one wound electrode element being directly wound around and directly supported by said pin.

As far as aspect a), applicant's arguments that "*the capacity of less than 1 Ah or less*" makes the claim patentable over Souliac et al's disclosed capacity greater than 10 Ah is not



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sufficient to overcome the ground of rejection. Note first that Souliac et al's disclosed capacity greater than 10 Ah fully encompasses at least 1 Ah or fractions thereof. Thus, if applicant is intending to allege that only one (1) unit of electricity equal to the quantity carried past any point of a circuit in one hour by a steady current of one ampere is not covered by ten (10) unit of electricity of Souliac et al, then it is equivalent to say that 10 units of anything does not comprise only one (1) unit (or fractions) of said anything. Simply put, it is equivalent to say that 10 units of orange/apple do not include one (1) unit of orange/apple. From a practical point of view, applicant's allegation may be true, but from a mathematical perspective, and by definition of Real or Natural numbers, such allegation is far from being accurate. Problem here also lies in the definition of energy capacity in the context of ampere-hour (Ah) which is a unit quantity of electricity equal to the quantity carried past any point of a circuit in one hour by a steady current of one ampere. Even though such energy capacity is expressed as a magnitude for purposes of measurability, such an energy capacity is measure relative to a steady current of one ampere passing any point in one hour. That is to say, if ten (10) units of electricity pass any given point, then, necessarily, one (1) (or a fraction of it) thereof also passes through that point. Therefore, it is reasonable to conclude that Souliac et al's disclosed capacity of at least 10 Ah does include the claimed energy capacity of 1 Ah. Not yet convinced? A textbook on Theory of Numbers from any distinguished mathematicians may further illustrate what the examiner is expressing. In addition to that, from a chemical perspective, absent any electrochemically active composition in the present claims so as to sufficiently characterize applicant's energy capacity of 1 Ah or relate the battery's energy capacity to the electrochemical activity thereof, it is further contended that the electrochemical active materials of the prior art are capable of further delivering the energy

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capacity required by the applicant. Not yet convinced? From a dimensionally physical perspective, note that Souliac et al is concerned with “*compact storage cells*” (Souliac et al, Col 1, lines 25-27). Compactability is a major challenge for Souliac et al, as such, energy capacity of their battery must be also. In that event, applicant has failed to provide any objective evidence whatsoever to demonstrate why applicant’s specific capacity is critical or provides superior results. If there is no such evidence, and applicant relies heavily on the intended use of the battery (battery application), then it is noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

16. In response to applicant's argument that “*features b-d contribute to a compact buildup of the small capacity battery*”, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

### ***Conclusion***

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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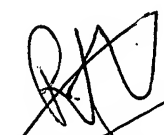
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (571) 272-1282. The examiner can normally be reached on Monday-Thursday (8:00 am - 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Raymond Alejandro  
Primary Examiner  
Art Unit 1745

  
**RAYMOND ALEJANDRO  
PRIMARY EXAMINER**